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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,863	05/18/2006	Bernd Hoecker	203tp02.us (TOP-06-3)	3826
40256	7590	05/23/2007		
FERRELLS, PLLC P. O. BOX 312 CLIFTON, VA 20124-1706			EXAMINER REDDY, KARUNA P	
			ART UNIT	PAPER NUMBER
			1713	
			MAIL DATE	DELIVERY MODE
			05/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/579,863	Applicant(s) HOECKER, BERND	
	Examiner Karuna P. Reddy	Art Unit 1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☒ Claim(s) 13, 14 and 18 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>5/18/2006</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

1. It is noted that applicant did not provide an English translation of the foreign priority application (Germany 103 54 336.8).

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an

invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-12 and 16-19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-16 of copending Application No. 10/579,869 in view of Fitzgibbon (US 5, 464, 585).

The copending application is silent with respect to presence of dye in the decoration material.

However, Fitzgibbon teaches molded articles having one or more auxiliary materials, especially for enhancing such properties as color (column 3, lines 6-9). Some examples of parts in which the application of this invention will find utility (column 5, lines 29-31) are decorative surfaces (column 5, lines 35). Preferred material for the bulk material comprises cycloolefins containing at least one norbornene group and includes norbornene and tetracyclododecene (column 6, lines 54-57). Suitable materials for altering the color of molded article include carbon black in admixture with pigments and/or dyes conventionally used for coloring (column 7, lines 12-14). Altering the color is important for providing a more consumer oriented appearance. Coloration is especially useful where the natural color is unappealing or in certain applications where it is transparent or translucent (column 7, lines 20-24). Therefore, it would have been obvious to

one skilled in the art at the time invention was made to add coloring material such as dyes to decorative material of the co-pending application to obtain decorative material that has a consumer oriented appearance.

This is a provisional obviousness-type double patenting rejection.

Claim Objections

4. Claims 13-14 and 18 are objected to because of the following informalities: The claims are written in an improper Markush form (See MPEP 2111.03) i.e. Claim 13 recites "...selected from Hostasol Red GG, Hostasol Red 5B." and should read ".... selected fromHostasol Red GG **and** Hostasol Red 5B." Claim 14 recites "... Hostasol Red GG, Hostasol Red 5B." and should read "....Hostasol Red GG **or** Hostasol Red 5B." Claim 18 recites "... **and/or**..." and should read ".... **or**...". Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 19 provides for the use of ".... decoration material", but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

7. Claim 19 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).
8. Claims 13-14 contains the trademark/trade name "Solvaperm ... Polysynthren.... PV.... Hostasol ...". Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe a dye and, accordingly, the identification/description is indefinite.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 1713

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 1-12 and 18-19 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Jacobs et al (US 6, 365, 686 B1) in view of Fitzgibbon (US 5, 464, 585).

Jacobs et al disclose cycloolefin copolymer made by polymerization of 0.1-99.9 wt% of at least one polycyclic olefin and 0.1 to 99.9 wt% of monomers of at least one acyclic 1-olefin (abstract). The index of refraction of the reaction products, determined using an Abbe refractometer and mixed light, is in the range from 1.520 to 1.555 (column 25, lines 51-53). Particularly preferred polycyclic olefins are norbornene and tetracyclododecene. They are preferably copolymerized with ethylene. Very particular preference is given to ethylene-norbornene and ethylene-tetracyclododecene copolymers (column 24, lines 1-5).

The cycloolefin copolymers prepared have a mass average molar mass (M_w) of from 1,000 to 10,000,000 (column 24, lines 59-61). The low end of M_w reads on the entanglement molecular weight and molar mass of claims 4-5.

Since the index of refraction is very close to crown glass, the products can be employed as a substitute for glass in various applications (column 25, lines 54-56) including lenses, prisms, support plates (column 25, line 57), injection molded parts (column 25, line 67). The cycloolefin polymers have viscosity numbers of from 10 to 1000 ml/g (column 24, line 65-66).

The prior art of Jacobs is silent with respect to the presence of a dye and Abbe number of claim 1 and other properties of the cycloolefin co-oligomer in claims 6 and 8-11.

However, Fitzgibbon teaches molded articles having one or more auxiliary materials, especially for enhancing such properties as color (column 3, lines 6-9). Some examples of parts in which the application of this invention will find utility (column 5, lines 29-31) are decorative surfaces (column 5, lines 35). Preferred material for the bulk material comprises cycloolefins containing at least one norbornene group and includes norbornene and tetracyclododecene (column 6, lines 54-57). Suitable materials for altering the color of molded article include carbon black in admixture with pigments and/or dyes conventionally used for coloring (column 7, lines 12-14). Altering the color is important for providing a more consumer oriented appearance. Coloration is especially useful where the natural color is unappealing or in certain applications where it is transparent or translucent. Accordingly these materials are present in amounts effective to alter appearance of the molded article (column 7, lines 20-26). Therefore, it would have been obvious to one skilled in the art at the time invention was made to add

dye to the low molecular weight cycloolefin copolymer of Jacobs et al and obtain a decorative material with consumer oriented appearance.

As to the Abbe number¹ of 50 to 60, it is a function of refractive index of material and overlaps with that of the instant claim 1.

As to the average chain length of claim 6, it is a function of molecular weight and molecular weight of copolymer on the low end overlaps with that of the instant invention.

As to the properties recited in claims 8-11, they are inherent in view of the substantially similar material of Jacobs et al in view of Fitzgibbon and the instantly claimed decorative material. See *In re Best*, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977). See MPEP § 2112.

As to the decorative material comprising a mixture of two different densities in claim 18 and the use of decorative material as filler material or display material in claim 19, it is within the scope of a skilled artisan and would have been obvious.

12. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobs et al (US 6, 365, 686 B1) in view of Fitzgibbon (US 5, 464, 585) as applied to claim 1 above, and further in view of Spiess et al (US 4, 352, 672).

The discussion with respect to Jacobs et al in view of Fitzgibbon in paragraph 11 is incorporated herein by reference.

¹ Abbe number is defined as $(n_D - 1)/(n_F - n_C)$, where n_D , n_F and n_C are refractive indices of material at the wavelengths of Fraunhofer D-, F- and C- spectral lines (589.2, 486.1 nm and 656.3 nm respectively).

The prior art of Jacobs et al in view of Fitzgibbon is silent with respect to the type and amount of dye used to color the decorative material.

However, Spiess et al teach colorful and figurative designs of shaped synthetic-resin articles (abstract). Changeable colorants for the invention include organic dyes which have proven themselves well in the coloring of synthetic resins such as monoazo dyes, diazo dyes and anthroquinone dyes (column 2, lines 53-59). See example 1 and 3 wherein the dye is Solvaperm Green G and Solvaperm Red Violet R dye in amounts of 0.01% and 0.03% respectively. Therefore, it would have been obvious to one skilled in the art at the time invention was made to use monoazo dyes, diazo dyes and anthroquinone dyes in the decorative material of Jacobs et al in view of Fitzgibbon because Spiess et al have proven successfully that changes occur in organic dyes such as monoazo dyes, diazo dyes and anthroquinone dyes and one of ordinary skill in the art would expect organic dyes such as monoazo dyes, diazo dyes and anthroquinone dyes in the amount specified above to produce decorative materials that can change colors.

13. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobs et al (US 6, 365, 686 B1) in view of Fitzgibbon (US 5, 464, 585) as applied to claim 1 above, and further in view of Elliott (US 4, 292, 016).

The discussion with respect to Jacobs et al in view of Fitzgibbon in paragraph 11 is incorporated herein by reference.

The prior art of Jacobs et al in view of Fitzgibbon is silent with respect to the process of molding the cycloolefin oligomer.

However, Elliott teaches a process for solidifying molten material by pouring onto a substrate and cooling in which undesired crystallinity is avoided by first forming a solidified protective stabilizing skin on the melt surface by carefully controlled air cooling (abstract). The preferred substrate for pouring or casting molten material is an endless belt of stainless steel known as "Sandvik belt". This belt provides good heat exchange from the molten material as it is undergoing cooling through the metal belt which is sprayed by water jets (column 2, lines 48-54). Therefore, it would have been obvious to one skilled in the art at the time invention was made to prepare a mold of cycloolefin oligomer of Jacobs et al in view of Fitzgibbon by pouring the mixture of cycloolefin oligomer and dye on to a Sandvik belt and cast it into a mold while cooling to avoid undesired crystallinity.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karuna P. Reddy whose telephone number is (571) 272-6566.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1713

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Karuna P Reddy
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